RESULTS: The responses from 29 of the thirty-two patients (91%) surveyed were analyzed. Most patients were able to answer questions regarding FN, including whether their health care provider had discussed, and if they had received, any FN prophylaxis (81% and 60%, respectively). The attribute with the most impact on patient's choices was "risk of developing an infection"; whereas "inconvenience of treatment" had the least impact and was likely confounded with "frequency of treatment." The median completion time was 13 minutes. **CONCLUSIONS:** The pilot study results suggest that the survey is feasible in the breast cancer population. The only change to the survey instrument will be the removal of the attribute "inconvenience of treatment"; otherwise, the 16 treatment-scenario design, including the "no treatment" option, will be maintained.

PCN123

A CONJOINT ANALYSIS OF WILLINGNESS TO PAY TO AVOID METASTATIC BREAST CANCER SIDE EFFECTS

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OBJECTIVES: Metastatic breast cancer (MBC) patients are treated with a variety of regimens with differing side effects that can reduce the patients' quality of life. Conjoint analysis is a research method used to evaluate how trade-offs are made between different attributes. This study assessed the willingness to pay (WTP) to avoid side effects related to MBC treatment using conjoint analysis. **METHODS:** An online, self-administered conjoint analysis survey of US adult female MBC patients was conducted to elicit preferences for MBC treatment side effects. Attributes included in the analysis with levels described in lay terms were: Alopecia, Diarrhea, Fatigue, Nausea, Neuropathy, Pain, Neutropenia and Out of pocket costs. 15 choice-based conjoint questions were presented where patients selected the most preferred therapy. A partial profile design was used to allow for each treatment description to be made with 3 instead of all 8 attributes. The attribute choices for each question included two side effects and an out of pocket price. The survey also collected information on prior treatment regimens, previous side effect history, and demographics. **RESULTS:** There were 298 respondents. Most respondents were white (84%), married (57%) over 40 years of age (86%), and covered with private insurance (57%). MBC patients were WTP (US$) $3,894 to avoid severe diarrhea, $3,479 to avoid being hospitalized due to infection, $3,211 to avoid severe nausea, $2,764 to avoid severe tingling in hands and feet, $2,652 to avoid severe fatigue, $1,853 to avoid obvious hair loss and $1,458 to avoid severe pain. The most important attributes when selecting a therapy for MBC in terms of average utility were neutropenia, diarrhea and nausea. **CONCLUSIONS:** Patients most highly value the avoidance of diarrhea, neutropenia, and nausea with MBC treatment regimens. Additional research with a global patient population is needed to quantify the WTP to avoid MBC side effects.

PCN124

LOST PRODUCTIVITY IN POPULATION OF CANCER PATIENT'S CLOSE RELATIVES IN POLAND

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OBJECTIVES: Cancer more than other diseases concerns not only patients themselves, but also close relatives of patients. The aim of this study was to estimate lost productivity in a population of close relatives of cancer patients who provide them with home care. **METHODS:** Survey on a representative sample of Polish economically active population of close relatives to cancer patients was planned. To assess the impact of cancer on productivity of relatives to cancer patients a modified questionnaire WPAI-SHP was used. The WHO performance scale was used to assess general health status of cancer patients. Human capital approach was used to estimate the absenteeism and presenteeism costs. Values are presented in Euro (exchange rate: 1 EUR=4.20 PLN). **RESULTS:** A total of 23,518 persons were questioned between August 2011 and April 2012. Of them 112 (0.48%) met inclusion criteria and completed WPAI-SHP questionnaire but only 98 persons completed questionnaire properly and were finally included in calculation. The mean age of included persons was 40.2±12.5 years and the average declared weekly work time was 42.7±14.1 hours. The average percent work time missed due to close relatives cancer was 4.7% and corresponded to a weekly average time of the absence of 1.9 hours. In contrast, the percent of working impairment due to cancer of close relatives was estimated at 21.0% and corresponded to weekly average productivity loss of 7.3 hours. When projected on total population, the estimated indirect costs associated with absenteeism amounted to about 154.5 million EUR and were significantly lower than the estimated costs of presenteeism – 607.4 million EUR. **CONCLUSIONS:** The analysis showed that the loss of productivity in a population of close relatives of cancer patients have important implications for the Polish economy, however less pronounced than costs of productivity loss measured in cancer population (1,935 billion EUR).

PCN125

COST OF PRESENTEEISM DUE TO CANCER IN POLAND

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OBJECTIVES: We previously reported that indirect costs of absenteeism in the workplace owing to cancer are almost twice as high as the estimated direct costs of cancer treatment in Poland. Although approximately 60% of the absenteeism costs were caused by premature mortality, to gain a full understanding of the indirect costs of lost productivity the presenteeism in the workplace must be analyzed. **METHODS:** Survey on a population of about 300 economically active patients (score 80 or above on Karnofsky performance scale) with cancer was planned at 10 regional oncology centers in Poland. To assess the impact of health on productivity a modified questionnaire WPAI-SHP was used. Due to the considerable heterogeneity of the study group and given the limited number of respondents we have refrained from collecting data on clinical characteristics of the disease. Human capital approach was used to estimate the presenteeism costs. Values are presented in Euro (exchange rate: 1 EUR=4.20 PLN). **RESULTS:** Data on 299 patients were collected. The mean age of surveyed patients was 51 years and the average declared weekly work time was 41 hours. The average time of the absence from work due to cancer in the study population was 7.6±9.9 hours. The estimated average loss of productivity in the workplace was 37.3%, corresponding to 10.3±8.5 loss of hours of work. When projected on total economically active population with cancer, the estimated indirect costs associated with the presenteeism amounted to about 363 million EUR and were significantly lower than the previously estimated costs of sickness absence (1,572 million EUR). **CONCLUSIONS:** The analysis showed that the loss of productivity associated with the presenteeism among cancer patients has important implications for the Polish economy but less pronounced than costs of absenteeism in the workplace. *This study was funded by the Ministry of Science and Higher Education grant no. N N405 115034.*

CANCER - Health Care Use & Policy Studies

PCN126

CAN A POPULATION-BASED PATIENT REGISTRY IMPROVE THE FEASIBILITY OF OUTCOMES RESEARCH IN MULTIPLE MYELOMA?

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OBJECTIVES: Dutch policy requires evidence from outcomes research for the assessment of appropriate drug use and real-world cost-effectiveness. We investigated whether a population-based patient registry could improve the feasibility of outcomes research in multiple myeloma compared to a retrospective cohort study. **METHODS:** Two methods were used to investigate the feasibility of outcomes research. First, we conducted outcomes research for bortezomib in multiple myeloma (n=139) by retrospectively collecting detailed data from hospital medical records in 38% of all Dutch hospitals. Second, we conducted outcomes research by using a population-based registry for haematological malignancies (PHAROS) covering 40% of the Netherlands. Up till now, the registry contains 3093 patients, including 802 patients with multiple myeloma. **RESULTS:** In the retrospective bortezomib study, it was possible to gather data on drug and resource use in everyday practice. However, due to great patient heterogeneity, extensive treatment variation (>10 drugs in >20 combinations) and missing prognostic information (e.g. 71% missing serum β2-microglobulin levels), it was impossible to estimate incremental cost-effectiveness of bortezomib. The PHAROS population-based registry also provided data on drug and resource use in everyday practice. Like the retrospective study, the registry revealed extensive treatment variation. This, in combination with great patient heterogeneity, challenged the feasibility to identify appropriate groups of comparable patients to calculate cost-effectiveness. **CONCLUSIONS:** Compared to a clinical trial, outcomes research in multiple myeloma is complicated by extensive treatment variation and wide patient heterogeneity. The PHAROS registry provides better generalisable outcomes research results, but many challenges remain in data analysis. Nevertheless, the greater number of real-world patients might provide the opportunity to obtain a sufficiently valid cost-effectiveness estimate by using comprehensive modeling techniques and different data sources.

PCN127

POLICY MAKER, PLEASE CAREFULLY CONSIDER YOUR NEEDS: DOES OUTCOMES RESEARCH OF BORTEZOMIB FOR ADVANCED MULTIPLE MYELOMA REDUCE UNCERTAINTY?

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OBJECTIVES: Dutch policy regulations for expensive inpatient drugs require outcomes research for the assessment of appropriate drug use and cost-effectiveness after four years of temporary reimbursement. We investigated whether outcomes research of bortezomib in advanced multiple myeloma reduced decision makers' uncertainty. **METHODS:** Our cohort study included 139 patients who were treated for advanced multiple myeloma outside of a clinical study. Detailed data were retrospectively collected from medical records in 38% of all Dutch hospitals. **RESULTS:** It was possible to develop evidence on types of drug used, dosages, dose modifications and health care costs. However, it was impossible to identify a single treatment comparator (>10 drugs in >20 combinations), partly due to rapid developments in treatment for multiple myeloma. Moreover, patients treated with bortezomib (n=72) were not comparable to other patients (n=67) regarding prognostic factors. It was not clear whether physicians used standardised outcome measures (i.e. EBMT response and CTC toxicity criteria) since such information was often not reported in medical records. Although different adjustment techniques were applied to the Cox multivariate regression model to obtain a valid (overall) survival estimate, none succeeded in correcting for the observed confounding. Moreover,